St. Andrews Biological Station Publications 1977- 86

F Sander

Biological Station
St. Andrews, N.B. E0G 2X0

February 1988

Canadian Manuscript Report of Fisheries and Aquatic Sciences No. 1960

Fisheries and Oceans Pêches et Océans

Canada

88-03324/

Canadian Manuscript Report of Fisheries and Aquatic Sciences

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Rapport manuscrit canadien des sciences halieutiques et aquatiques

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ST. ANDREWS BIOLOGICAL STATION PUBLICATIONS 1977-86

by

F. Sander
Biological Sciences Branch
Department of Fisheries and Oceans
Biological Station
St. Andrews, N. B. E0G 2X0

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Cat. No. Fs 97-4/1960E ISSN 0706-6473

Correct citation for this publication:

Sander, F. 1988. St. Andrews Biological Station publications 1977-86. Can. MS Rep. Fish. Aquat. Sci. 1960: iv + 32 p.

PREFACE

With the reorganization in 1976 of fisheries research in the Maritimes region, the St. Andrews Biological Station became more firmly integrated into the regional structure of the Atlantic Fisheries Service. As a result of this reorganization, the Biological Station was no longer managed as an integrated research institute. The publication of Station annual reports also came to an end, thus ending the opportunity to convey, in a unified fashion, the breadth, depth and quality of the investigations conducted by the staff of the various component Divisions of the regional Biological Sciences Branch working at the Biological Station.

The principal objective of this bibliography is, therefore, to redress this deficiency by assembling, under one cover, a compilation of all the publications which are the product of the many research programs completed at the Biological Station over the past decade. The titles are listed in chronological order, but for each year are arranged alphabetically according to authorship. The list is comprehensive insofar as all categories of publications, i.e. primary publications, scientific and technical reports, conference proceedings or abstracts, and interpretive, popular and miscellaneous scientific articles, have been included to represent the wide spectrum of research carried out at the Biological Station.

Eight hundred and forty-eight titles are listed in this report, of which 282 are primary publications. They reflect the principal research areas of the St. Andrews portions of the Invertebrates and Marine Plants Division (now Invertebrates, Marine Plants and Environmental Ecology), the Marine Fish Division and the former Fisheries and Environmental Sciences Division (now divided into a newly created Fish Aquaculture and Applied Physiology Division and a Toxicology and Organic Contaminants Section of the Physical and Chemical Sciences Branch). As such, they describe research directed towards such scientific topics as the estimation of lobster stocks and the magnitude of fishing mortality, and recording growth and movements of lobsters in the Bay of Fundy and the coastal areas of southwestern Nova Scotia; biological research on commercially important marine invertebrates, such as lobsters, crab and scallops; physiology of growth, culture and reproduction of salmonids and lobster in support of aquaculture activities; research on the effects of toxic metal and organochlorine pollution on fish and shellfish; investigations on the effects of man-made or natural contaminants and physical changes on fisheries and fish habitats, including paralytic shellfish poisoning (PSP) - causing red tides; research on the effects of acid rain on Atlantic salmon; biological research on herring and various groundfish species; monitoring of herring weir fisheries; surveys and stock assessments of important commercial species on the Scotian Shelf, and in the Bay of Fundy; early life-history studies of groundfish; parasitological surveys of commercially important groundfishes; age and growth studies; trawl survey methodology; acoustics research; methods of computer data analysis.

The purpose of this report is to update the publication record of the fisheries research carried out at the Biological Station in St. Andrews and to provide a useful reference for readily identifying the types of research activities over the past decade.

PRÉFACE

Devant la réorganisation en 1976 des programmes de recherches halieutiques dans la région des Maritimes, la station biologique de St. Andrews s'est intégrée plus fermement dans la structure régionale du Service des pêches de l' Atlantique. Suivant cette réorganisation, la station biologique n'est plus administrée comme institut de recherche intégré. La publication des rapports annuels de la station a aussi pris fin, mettant ainsi un terme à la possibilité de communiquer, dans une seule publication, toutes les enquêtes menées par le personnel des diverses divisions de la Direction régionale des sciences biologiques qui travaille à la station biologique, et d'en transmettre toute l'ampleur et la qualité.

La présente bibliographie veut combler cette lacune et vise principalement à regrouper, dans un seul document, les titres de toutes les publications découlant des nombreux programmes de recherche réalisés à la station biologique au cours des dix dernières années. Les titres sont énumérés en ordre chronologique, mais pour chaque année, on les a aussi disposés en ordre alphabétique, d'après l'auteur. Il s'agit d'une liste exhaustive qui énumère toutes les catégories de publications, notamment les publications principales, les rapports scientifiques et techniques, les comptes rendus de conférence et les résumés, ainsi que des articles d'interprétation et de vulgarisation dans le domaine scientifique, afin de représenter la gamme complète des recherches effectuées à la station biologique.

Cette bibliographie contient 848 titres de publications, dont 282 sont des publications principales. Ces titres reflètent les principaux domaines de recherche visés par les composantes de la station biologique de St-Andrews qui relèvent de la Division des invertébrés et des plantes marines (maintenant appelée la Division des invertébrés, des plantes marines et de l'écologie du milieu), la Division des poissons de mer et l'ancienne Division des sciences halieutiques et environnementales (maintenant divisée en deux: une nouvelle Division de la pisciculture et de la physiologie appliquée ainsi qu'une Section de la toxicologie et des contaminants organiques, qui relève de la Direction des sciences physiques et chimiques). Ces publications décrivent les recherches portant sur une multitude de sujets scientifiques: l'estimation des stocks de homard et l'ampleur de la mortalité due à la pêche, l'étude de la croissance et du déplacement du homard dans la baie de Fundy et les eaux côtières du sud-ouest de la Nouvelle-Écosse, la recherche biologique effectuée sur les invertébrés marins exploitée sur une base commerciale, comme le homard, le crabe et le pétoncle, l'aspect physiologique de la croissance, de l'élevage et de la reproduction des salmonidés et du homard dans le cadre des activités d'aquaculture, l'étude des effets pollutants des métaux toxiques et des organochlorés sur le poisson et les fruits de mer, l'étude des effets des contaminants naturels ou provoqués par l'homme ainsi que l'étude des changements du milieu physique sur les pêches et l'habitat du poisson, y compris l'intoxication paralysante causée par les mollusques (IPM) - pouvant entraîner les marées rouges, l'étude des effets de la pluie acide sur le saumon de l'Atlantique, la recherche bibliogique sur le hareng et les diverses espèces de poisson de fond, la surveillance de la pêche fixe au hareng, l'étude et l'évaluation des stocks des importantes espèces commerciales qui vivent sur le plateau continental de la Nouvelle-Écosse et dans la baie de Fundy, l'étude des premiers cycles de vie du poisson de fond, l'analyse parasitologique du poisson de fond exploitée par les pêcheurs commerciaux, l'étude de l'âge et de la croissance du poisson, les méthodes utilisées dans les études au chalut, la recherche acoustique, et l'analyse de données informatiques.

Le présent rapport a pour objet de mettre à jour la liste des publications en recherches halieutiques effectuées à la station biologique de St-Andrews et de fournir un ouvrage de référence facile à consulter où seront énumérées toutes les activités de recherches entreprises au cours des dix dernières années.

St. Andrews Biological Station Publications 1977-86

1977

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ACKNOWLEDGMENTS

The editor wishes to acknowledge the assistance provided by all the scientific staff in the preparation of this report and, in particular, the efforts of Darlene Warren, Brenda Fawkes, Jeanine Hurley and summer student, Peter Ross. The encouragement, support and advice of Dr. R. H. Cook during this project were also appreciated.